

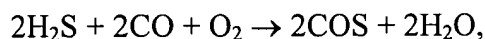
## AMENDMENTS TO THE CLAIMS

**1. (Currently Amended)** A COS treatment apparatus for a gasified gas containing COS, H<sub>2</sub>S, H<sub>2</sub>O, O<sub>2</sub>, and CO, which comprises:

a first reactor into which the gasified gas is to be introduced, ~~the gas having~~ the first reactor being configured to increase an initial concentration of COS in the gas and decrease concentrations of H<sub>2</sub>S, CO and O<sub>2</sub> in the gas at a gas temperature of at least 300°C; and

a second reactor located at a downstream side of a gasified gas flow with respect to the first reactor, the second reactor being configured to decrease the increased concentration of COS in the gas passed through the first reactor to a concentration lower than the initial concentration of COS in the gas,

wherein the first reactor comprises an O<sub>2</sub> removal catalyst for accelerating the following reaction:

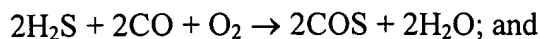


the O<sub>2</sub> removal catalyst consisting of TiO<sub>2</sub> and Cr<sub>2</sub>O<sub>3</sub> or consisting of TiO<sub>2</sub> and NiO, and wherein the second reactor comprises a COS conversion catalyst.

### **2-3. (Cancelled)**

**4. (Original)** The COS treatment apparatus according to claim 1, wherein said O<sub>2</sub> removal catalyst is located in a higher-temperature region with respect to said COS conversion catalyst.

**5. (Currently Amended)** A COS treatment method for a gasified gas containing COS, H<sub>2</sub>S, H<sub>2</sub>O, O<sub>2</sub>, and CO, the method comprising:  
increasing an initial concentration of COS in the gas and decreasing concentrations of H<sub>2</sub>S, CO and O<sub>2</sub> in the gas ~~removing O<sub>2</sub> from the gas~~ by using an O<sub>2</sub> removal catalyst consisting of TiO<sub>2</sub> and Cr<sub>2</sub>O<sub>3</sub> or consisting of TiO<sub>2</sub> and NiO at a gas temperature of at least 300°C to accelerate the following reaction:



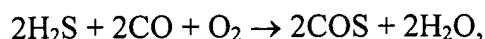
after the ~~removing of O<sub>2</sub> from the gas~~ increasing of the initial concentration of COS in the gas and the decreasing of the concentrations of H<sub>2</sub>S, CO and O<sub>2</sub> in the gas, decreasing the increased concentration of COS in the gas to a concentration lower than the initial concentration of COS in the gas by converting COS contained in the gas to H<sub>2</sub>S by using a COS conversion catalyst.

**6-7. (Cancelled)**

**8. (Currently Amended)** The COS treatment method according to claim 5, wherein said ~~removing O<sub>2</sub> from the gas~~ increasing of the initial concentration of COS in the gas and decreasing of the concentrations of H<sub>2</sub>S, CO and O<sub>2</sub> in the gas is performed at a higher temperature with respect to said ~~converting COS to H<sub>2</sub>S~~ decreasing of the increased concentration of COS in the gas.

**9. (Currently Amended)** A COS treatment apparatus for a gasified gas containing COS, H<sub>2</sub>S, H<sub>2</sub>O, O<sub>2</sub>, and CO, comprising:

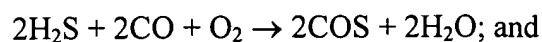
a reactor into which the gasified gas is to be introduced, the reactor being configured to convert COS to H<sub>2</sub>S in the presence of O<sub>2</sub>, the reactor comprising a TiO<sub>2</sub> catalyst carrying Cr<sub>2</sub>O<sub>3</sub> and BaO, wherein the TiO<sub>2</sub> catalyst carrying Cr<sub>2</sub>O<sub>3</sub> and BaO is an O<sub>2</sub> removal catalyst for accelerating the following reaction:



and wherein the TiO<sub>2</sub> catalyst carrying Cr<sub>2</sub>O<sub>3</sub> and BaO is a COS conversion catalyst.

**10. (Currently Amended)** A COS treatment method for a gasified gas containing COS, H<sub>2</sub>S, H<sub>2</sub>O, O<sub>2</sub>, and CO, the method comprising:

removing O<sub>2</sub> from the gas by using a TiO<sub>2</sub> catalyst carrying Cr<sub>2</sub>O<sub>3</sub> and BaO to accelerate the following reaction:



simultaneously converting COS to H<sub>2</sub>S by using the TiO<sub>2</sub> catalyst carrying Cr<sub>2</sub>O<sub>3</sub> and BaO.